Identity Management

https://airavata.apache.org/custos/

What Is Custos?

- Custos is open source software that encapsulates common security capabilities
    - Federated authentication with Campus Identifties through CILogon
    - User Management with Keycloak.org
    - Role and Attribute Management with Keycloak.org
    - Group Management with the Airavata Sharing Service
    - Digital Object Sharing Management with the Airavata Sharing Service
    - Resource Secrets Management with HashiCorp's Vault
- Custos software is available from https://github.com/apache/airavata-custos.

What Is the Custos Service?

- The Custos Security Service ("Custos Service") is a deployment of the Custos software
- The IU Cyberinfrastructure Integration Research Center operates the Custos Service

CYBERINFRASTRUCTURE
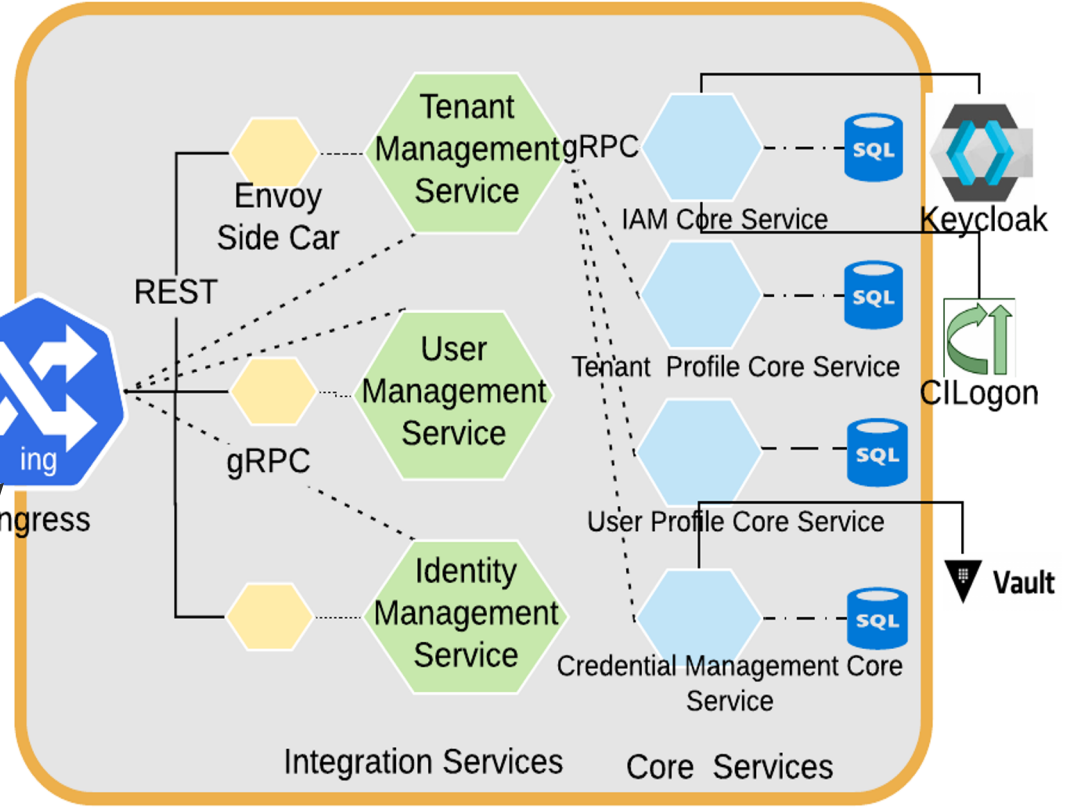INTEGRATION RESEARCH CENTER
PERVASIVE TECHNOLOGY INSTITUTE

Custos Big Picture

Sample Gateway Hands On

- The Sample Gateway provides a simple illustration of Custos's capabilities
- It is not Custos
- You can use the Sample Gateway to see how to integrate with Custos using JavaScript
- We'll do a deep dive into the Python SDK later

Sample Gateway Follow Up

- You can download and install the sample gateway from https://github.com/apache/airavata-custos-portal/tree/custos-tenant-portal

- Instructions for setting up and repeating this tutorial are at https://cwiki.apache.org/confluence/display/CUSTOS/Custos+Gateways+2020+Tutorial

- You'll need to register it as a Custos tenant

- The Sample Gateway illustrates Custos's JavaScript SDK

Why Use Custos?

🔒 Security services are critical for your application

🛢 Custos provides an open source implementation

🤝 You can also learn from Custos transparent operations and support for clients

Who Implements Custos Software?

- It is an open source project that is part of Apache Airavata
- Apache Software Foundation Licensing and Project Governance
- Custos is a standalone reimplementation of Apache Airavata's security components

Custos Mailing list?

Subscribe to custos-subscribe@airavata.apache.org
Then post to custos@airavata.apache.org

How Do I Report Issues?

https://github.com/apache/airavata-custos/issues

Use this to report issues for either the service or the software

Should I Run the Server Software Myself?

For the class you should consider using the Custos Service

You are welcome to install locally

Custos master branch is the branch used by the Custos Service

Learn from Custos Architecture and Implementation